## ABSTRACT OF THE DISCLOSURE

Each of wireless interconnecting devices 4, 5, 6A, and 6B is structured to add a transfer AP list to a packet when transferring the packet while judging, when a packet is received, whether or not the received packet is a packet previously transferred by the wireless interconnecting device based on the judgment whether or not its own MAC address exists in a transfer AP list included in the received packet, and in a case its own MAC address does not exist in the transfer AP list, to transfer the received packet, when it is a kind of packet which needs to be transferred, with its own MAC address added to the transfer AP list so that endless transfer of the packet is prevented.